

CLAIMS

1. A charging method for use in a service providing system having (a) a first terminal device owned by a user and (b) a service providing server, connected to the first terminal device via a communication network, offering an information providing service to the first terminal device, the method comprising:

(I) a step of a service providing server transmitting, to the first terminal device, a modification command for modifying a predetermined parameter determining an operation of the first terminal device;

(II) a step of the first terminal device modifying the predetermined parameter only when the first terminal device receives the modification command for modifying the predetermined parameter from the service providing server; and

(III) a step of the service providing server charging the user owning the first terminal device a fee for the transmission of the modification command for modifying the predetermined parameter, in a case where the service providing server transmits, to the first terminal device, the modification command for modifying the predetermined parameter.

2. The method as set forth in claim 1, wherein:

upon receipt of a request for modifying the predetermined parameter from the user, the service providing server transmits, to the first terminal device owned by the user, the modification

command for modifying the predetermined parameter in accordance with a content of the received request.

3. The method as set forth in claim 2, wherein:

a second terminal device which is different from the first terminal device is owned by the user, the second terminal device being connected to the service providing server via a communication network; and

the request for modifying the predetermined parameter to the service providing server is made by the user by means of the second terminal device.

4. The method as set forth in any one of claims 1 through 3, wherein:

in offering a service of providing information to the first terminal device, the service providing server charges the user owning the first terminal device a fee for the service offered.

5. The method as set forth in any one of claims 1 through 3, further comprising:

(IV) a step of the service providing server, when the first terminal device owned by the user transmits certain information to the service providing server, rewarding the user with one or more points, the points varying in number depending on information received; and

(V) a step of the service providing server using at least one of the points owned by the user for settlement of the charge to the user.

6. The method as set forth in any one of claims 1 through 3, wherein:

the first terminal device is an in-vehicle terminal device provided in an automobile owned by the user, and

the predetermined parameter is a parameter determining an operation of the in-vehicle terminal device in a vehicle-antitheft system.

7. The method as set forth in claim 6, wherein:

the predetermined parameter is a parameter identifying a type of intimidation action and/or reporting action to be carried out when a sensor provided in the automobile detects an abnormal situation.

8. A service providing server for carrying out the charging method for use in a service providing system, as set forth in any of claims 1 through 3.

9. A service providing program for causing a computer to execute a process in the service providing server as set forth in claim 8.

10 A storage medium storing a service providing program for causing a computer to execute a process in the service providing server as set forth in claim 8.

11. A terminal device for carrying out the charging method for use in a service providing system, as set forth in any of claims 1 through 3.

12. A terminal processing program for causing a computer to execute a process in the terminal device as set forth in claim 11.

13. A recording medium containing a terminal processing program for causing a computer to execute a process in the terminal device as set forth in claim 11.

14. A control method of a service providing server being connected to a first terminal device and a second terminal device via a communication network, the service providing server offering an information providing service with respect to the first terminal device, the method comprising:

(I) a modification request accepting step of receiving a modification request from the second terminal device, the modification request requesting to transmit, to the first terminal device, a modification command for modifying a predetermined

parameter determining an operation of the first terminal device;
and

(II) a modification command transmitting step of generating the modification command in accordance with the modification request, and then transmitting the modification command to the first terminal device.

15. The method as set forth in claim 14, further comprising:

(III) a validity judging step of judging whether or not the modification request received from the second terminal device is valid.

16. The method as set forth in claim 15, wherein:

the first terminal device has a plurality of the parameter, the parameter being settable on a parameter-by-parameter basis, and

in the step (III), it is judged whether the modification request received from the second terminal device is valid with reference to a combination-table specifying, in advance, whether or not each combination of the parameters of the first terminal device is permitted.

17. The method as set forth in any one of claims 14 through 16, further comprising:

(IV) history recording step of storing, in a history information database, a content of a parameter setting when transmitting the

modification command to the first terminal device.

18. The method as set forth in claim 17, further comprising the step of:

(V) a setting restoration step of generating a modification command for change back a parameter into a previous state in accordance with the history information database, and then transmitting the generated modification command to the first terminal device.

19. A service providing server executing the control method of a service providing server, as set forth in any one of claims 14 through 18.

20. A service providing program for causing a computer to execute the control method of a service providing server, as set forth in any one of claims 14 through 18.

21. A storage medium containing a service providing program for causing a computer to execute the control method of a service providing server, as set forth in any one of claims 14 through 18.

22. A service providing system, comprising:

the service providing server as set forth in any one of claims 14 through 18; and

- 76 -

a first terminal device and a second terminal device, each of which being connected to the service providing server via a communication network.